Remarks

Introduction

The above-identified application has been carefully reviewed in light of the Office Action mailed June 24, 2004, which included a final rejection of the pending claims. This Amendment is being submitted within TWO MONTHS of the mailing date of the Final Office Action. Applicant submits that the amendments and remarks included herein show the present claims to be allowable and do not raise new issues. Therefore, applicant respectfully requests that this amendment be entered.

Claims 1-29 were pending, and claims 10, 11, 13-16, 20, 21, 28, and 29 have been withdrawn from consideration. By way of this response, claim 1 has been amended, and claims 10, 11, 13-16, 20, 21, and 28-29 have been cancelled without prejudice. Support for the amendments to the claims can be found in the application as originally filed, and no new matter has been added. Accordingly, claims 1-9, 12, 17-19, and 22-27 are pending.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 1-9, 12, 17-19, and 22-27 have been rejected under 35 U.S.C. § 112, first paragraph as allegedly containing subject matter which was not described in the specification.

Applicant does not concede with the rejection or the remarks made by the Examiner. However, to advance the prosecution of the above-identified application, the claims have been amended to more clearly indicate that the botulinum toxin

component is covalently coupled to the substance P component, as suggested by the Examiner.

In view of the above, applicant submits that the claims satisfy the requirements of 35 U.S.C. § 112, first paragraph, and respectfully requests that the rejection of the present claims based on this statutory provision be withdrawn.

Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1-9, 12, 17-19, and 22-27 have been rejected under 35 U.S.C. § 112, second paragraph as allegedly being indefinite.

Applicant respectfully disagrees that these claims are indefinite and traverses the rejections.

Claim 1, and the claims dependent therefrom, recite that a therapeutically effective amount of the agent is administered to a patient. The agent includes a botulinum toxin component covalently coupled to a substance P component. Thus, the claims are directed to administration of a therapeutically effective amount, not just an effective amount, as indicated by the Examiner.

Applicant submits that a therapeutically effective amount of an agent specifically excludes an amount which kills a patient, or a lethal amount. As understood by persons of ordinary skill in the art, a therapeutically effective amount of an agent is an amount of an agent that provides recovery and/or relief of one or more symptoms of a disease, disorder, and the like. Lethal amounts are not therapeutic because lethal amounts

result in the death of a patient, not a therapeutic treatment of the patient's pain, as recited in the present claims. Thus, applicant submits that a person of ordinary skill in the art would not be confused by the language of the present claims, and that the present claims are sufficiently definite to satisfy the requirements of 35 U.S.C. § 112, second paragraph.

Regarding the rejection of claim 9, applicant submits that the phrase "substance P functional analogue" does not render claim 9 indefinite. Applicant submits that the analogy of substance P functional analogues is readily determined by a person of ordinary skill in the art, and that the function of such analogues is certain. For example, a substance P functional analogue is an agent that interacts with a substance P receptor to provide an effect similar to substance P interacting with a substance P receptor. The analogy of such analogues can be determined using routine methods known to persons of ordinary skill in the art, for example, a substance P functional analogue can be tested in a conventional receptor binding assay or cell binding assay for cells that have substance P receptors. In addition, the effects of an interaction between such analogues and a substance P receptor can be evaluated using routine methods known to persons of ordinary skill in the art, including without limitation, electrophysiological, biochemical, and molecular biological methods. Thus, applicant submits that the phrase "substance P functional analogue" does not render claim 9 indefinite.

Regarding the rejection of claim 22-27, applicant traverses the rejections.

Claims 22-27 recite how the pain is quantified in order to provide a determination of the amount of pain reduction. Thus, the methods encompass using a pain quantification scale or assessment test. Applicant vigorously disagrees with the Examiner that the amount required to reduce pain cannot be readily determined since "pain" allegedly is not "readily measured based on a quantification scale".

Indeed, the American Medical Association (AMA) has an Internet website (http://www.ama-cmeonline.com) with a discussion of the Evaluation of Pain Characteristics and Intensity. A copy of some pages of that discussion are submitted herewith as **Exhibit A**. Page 1 of Exhibit A states that "A variety of validated pain scales are available to assist in the measurement of pain. ... Pain measurement tools include simple unidimensional scales or multidimensional questionnaires. ... Commonly used unidimensional scales include the verbal rating scale (VRS), the numeric rating scale (NRS), a visual analog scale (VAS), and a pictorial scale." Pages 2-7 of Exhibit A provide additional information regarding pain assessment tests or quantification scales, include the NRS, the VAS, the Faces Pain Scale, the McGill Pain Questionnaire (MPQ), the Memorial Pain Assessment Card, and the Brief Pain Inventory (BPI). In addition, pain quantification scales have been described in periodicals. For example, submitted herewith as **Exhibit B**, are two abstracts from journal articles regarding pain quantification scales. Page 1 of Exhibit B is the abstract of Closs et al., Á comparison of five pain assessment scales for nursing home residents with varying degrees of cognitive impairment", J. Pain Symptom Manage., 2004, 27(3):196-205, and page 2 of Exhibit B is Kamel et al., "Utilizing pain assessment

scales increases the frequency of diagnosing pain among elderly nursing home residents", J. Pain Symptom Manage., 2001, 21(6):450-5.

Thus, contrary to the Examiner's opinion, which has not been supported by any evidence, applicant submits that pain can be readily measured based on a quantification scale, as understood by persons of ordinary skill in the art, and as recited in the present claims. Applicant also submits that the amount of the agent required to reduce pain by a quantified amount can be readily determined using such quantification scales.

Regarding the Examiner's comments about "the amount that will reduce pain", applicant submits that such language does not render claims 22-27 indefinite. Such amounts are encompassed by the phrase "therapeutically effective amounts", and relate to specific amounts that result in certain amounts of pain relief, as recited in claims 22-27, and as discussed above. The amounts of the agent administered to a patient can be readily understood by a person of ordinary skill in the art as being an amount which results in a reduction in pain by the claimed percentages. Thus, applicant submits that the language of claims 22-27 is not indefinite.

In view of the above, applicant submits that the claims satisfy the requirements of 35 U.S.C. § 112, second paragraph, and respectfully requests that the rejection of the present claims based on this statutory provision be withdrawn.

Obviousness-Type Double Patenting Rejections

Claims 1-9, 12, 17-19, and 22-27 have been rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 1, 2, 4-7, 9, 11-20 of U.S. Patent No. 6,500,436.

Applicant submits that the Terminal Disclaimer filed on June 1, 2004 and received by the Examiner is sufficient to overcome the rejections.

In addition, each of the present dependent claims is separately patentable over the prior art. For example, none of the prior art disclose, teach, or even suggest the present methods including the additional feature or features recited in any of the present dependent claims. Therefore, applicant submits that each of the present claims is separately patentable over the prior art.

In conclusion, applicant has shown that the present claims are not subject to rejection for double patenting, and satisfy the requirements of 35 U.S.C. § 112. Therefore, applicant submits that the present claims, that is claims 1-9, 12, 17-19, and 22-27 are allowable. Therefore, applicant respectfully requests the Examiner to pass the above-identified application to issuance at an early date. Should any matters remain unresolved, the Examiner is requested to call (collect) applicant's attorney at the telephone number given below.

Respectfully submitted,

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